

CLAIMS

What is claimed is:

1. A computer system comprising:

a plurality of components;

a plurality of interfaces enabling interactions between said plurality of components;

a repository of data representing a current condition of said plurality of components and an interaction between said plurality of components, wherein at least some of said data includes a historic indication being at least one of a version and an update level; and

a search code enabling said repository of data to be searched for determining a status of a particular one of said plurality of components.
2. The computer system according to Claim 1, wherein said repository of data is arranged as a tree structure.
3. The computer system according to Claim 2, further comprising a table enabling correspondence between a non-historic identifier of a particular one of said plurality of components and a portion of said repository of said data corresponding to said particular one of said components identified by a historic identifier.
4. The computer system according to Claim 3, wherein said historic indication comprises an identifier in said tree structure.

5. The computer system according to Claim 1, wherein said search code is arranged as a directory server cooperating with said repository.

6. The computer system according to Claim 1, wherein said repository of data comprises separate subsets of data for modeling said condition of said plurality of components and said interactions of said plurality of components.

7. The computer system according to Claim 1, wherein said repository of data comprises data modeling software components and data modeling hardware components.

8. The computer system according to Claim 1, wherein said repository of data comprises a first subset of data defining a directional interaction between a server component providing an interface and a client component using said interface.

9. The computer system according to Claim 8, wherein said first subset of data is arranged to attach a “provide” version range identifying value to said server component and a “use” version range identifying value to said client component.

10. The computer system according to Claim 1,
wherein said repository of data includes a current group of data and is adapted to receive a new group of data; and
further comprising an update code capable of concurrently processing said current group of data and said new group of data, with a view to update said computer system.

11. The computer system according to Claim 10, wherein
said update code is capable of commit from said current group of data to said new group of data; and
said update code is capable of rollback from said new group of data to said current group of data.
12. The computer system according to Claim 1, wherein said repository of data comprises data relating to a configuration state of said computer system.
13. The computer system according to Claim 1, wherein said repository of data relating to a schema of a configuration state of said computer system.
14. The computer system according to Claim 1, wherein said search code is accessible to a management service code.
15. A method of managing a computer system, comprising:
defining a plurality of entities in said computer system as a plurality of components and a plurality of interactions between said plurality of components; and
storing a group of data forming a searchable representation of said plurality of components and said plurality of interactions.
16. The method according to Claim 15, wherein said searchable representation is arranged as a tree structure.

17. The method according to Claim 15, further comprising maintaining a table enabling correspondence between a non-historic identifier of a particular one of said plurality of components and said group of data for said particular one of said plurality of components, wherein said group of data comprises a historic indication.

18. The method according to Claim 17, wherein said historic identifier comprises part of a designation of a corresponding portion of said group of data in said tree structure.

19. The method according to Claim 15, wherein said group of data comprises a first subset for modeling said plurality of components and a second subset for modeling said plurality of interactions.

20. The method according to Claim 15, wherein said group of data comprises data for modeling software components and data for modeling hardware components.

21. The method according to Claim 15, wherein said group of data comprises data defining a plurality of direction interactions, wherein each direction interaction is between a server component providing an interface and a client component utilizing said interface.

22. The method according to Claim 21, wherein said data defining a plurality of direction interactions comprises data arranged to attach a “provide” version range

identifying value to said server component and a “use” version range identifying value to said client component.

23. The method according to Claim 21, further comprising:

wherein said group of data comprises a current group of data and is adapted to received a new group of data; and

concurrently processing said current group of data and said new group of data, with a view to update said computer system.

24. The method according to Claim 23, wherein concurrently processing said current group of data and said new group of data comprises:

committing from said current group of data to said new group of data, when an update is authorized; and

rolling back from said new group of data to said current group of data, when said update is not authorized.

25. The method according to Claim 15, wherein said group of data comprises data relating to a configuration state of said computer system.

26. The method according to Claim 15, wherein said group of data relating to a schema of a configuration state of said computer system.

27. The method according to Claim 15, further comprising determining a status of a particular one of said plurality of components.

28. The method according to Claim 27, wherein said determining said status is accessible to a management service.

29. The method according to Claim 15, wherein said group of data comprises data referred to component instances and data referred to component assignments.

30. A computer-readable medium containing a plurality of instructions which when executed cause a computer device to implement a method of managing a computer system, comprising:

generating a plurality of data defining a plurality of components and a plurality of interactions between said plurality of components;

storing said plurality of data as a searchable tree structure;

searching said tree structure wherein a status of a particular component is determined; and

enabling an interaction between a first and second ones of said plurality of components as a function of said status.

31. The computer-readable medium according to Claim 30, further comprising maintaining a table defining a mapping between a non-historic identifier of each of said plurality of components and a portion of said plurality of data corresponding to each of said plurality of components identified by a historic indication, wherein said historic indication is associated with a particular leaf of said searchable tree structure.

32. The computer-readable medium according to Claim 30, wherein said plurality of data comprises:

a first subset of data for modeling said components; and

a second subset of data for modeling said interactions between said plurality of components.

33. The computer-readable medium according to Claim 32, wherein said plurality of data comprises:

a third subset of data for modeling software components of said plurality of components; and

a fourth subset of data for modeling hardware components of said plurality of components.

34. The computer-readable medium according to Claim 30, further comprising:

updating a portion of said plurality of data if a configuration update is authorized;
and

rolling back an updated portion of said plurality of data if a configuration update is not authorized.